

Figure 66 is a perspective view of FEA model of the exterior walls with partial ceiling model.

Figures 61A, 62A, 65A and 66A show magnified portions of the related figures.

Figure 67 is a perspective view of the mesh lines of the exterior walls and the ceiling of building of Figure 57.

Figure 68 is a perspective view of the mesh lines of the exterior walls and the ceiling of a building of Figure 57.

Figure 69 is a perspective view of the mesh lines of the exterior walls, the ceiling and one roof rib of the building of Figure 57.

Figure 70 is a perspective view of the mesh lines of the exterior walls and the roof ribs of the building of Figure 57.

Figure 71 is a perspective view of the mesh lines of the exterior walls, the ribs and partial roof of the building of Figure 57.

Figure 72 is an inverted perspective view of the mesh lines of the building of Figure 57 without the interior walls

Figure 73 is an inverted perspective view of the mesh lines of the building of Figure 57 showing the base template for construction of the first partition wall.

Figure 74 is an inverted perspective view of the building of Figure 57 FEA model with the first interior partition.

Figure 75 is a perspective view of the building of Figure 57 with all interior partitions.

Figure 76 is a perspective view of the building of Figure 57 North wall with the GFRC Plate element cover shown at a distance.

Figure 77 is a perspective view of partial GFRC coating of some of the walls of the building of Figure 57.

Figure 78 is a perspective view of partial GFRC coating similar to Figure 77.

Figure 79 is perspective view of the inverted building of Figure 57 with the GFRC coating model of its exterior walls shown at a distance from the EPS walls.

Figure 80 is perspective view of the building of Figure 57 Roof Ribs GFRC FEA coating model.

Figure 81 is FEA model perspective view of the embodiment of another EPS composite building with curved ceiling system.

Figure 82 is another perspective view of the FEA model of the building of building of Figure 81.

Figure 83 shows the Model data dialogue menu of the Algor FEA software.

Figure 84 shows the Boundary Condition dialogue Box of the Algor FEA software.

Figure 85 shows the perspective view of a slice cut from the FEA model of the building of Figure 57.

Figure 86 shows the perspective view of a diagonal cut slice of the FEA model of the building of Figure 57.

Figure 87 shows the Material Property data dialogue box of the Algor FEA software showing the properties of Expanded Polystyrene.

Figure 88 shows the Material Property data dialogue box of the Algor FEA software showing the properties for GFRC.

Figure 89 shows the GFRC Dead Load stresses of the building of Figure 57.

Figure 90 is another view of GFRC Dead Load stresses of the building of Figure 57.

Figure 91 is the GFRC Wind Load (100 mph) stress contour of the building of Figure 57.

Figure 92 is the EPS Foam Stress Contour for combination of 100mph wind with a 30 psf snow loading on building of Figure 57.

Figure 93 is the GFRC Stress Contour of embodiment of another EPS composite building induced by an earthquake with 1994 California Northridge Earthquake spectrum.

Table of Figure 94 shows the Nodal forces calculated by hand and applied to the FEA model of the building of Figure 57 for structural analysis.

Figure 95 shows the base constrains of the building at Ground level to top of the foundation footing for the building of Figure 57.

Figure 96 shows the results of stress analysis for combination of Gravity Dead Load, 100 mph wind Load and snow with intensity of 30 psf on the embodiment of a 24 inch slice frame cut from a typical two story composite building.

Figure 97 shows the results of Displacement analysis for combination of Gravity Dead Load, 100 mph wind Load and snow with intensity of 30 psf on the embodiment of a 24 inch slice frame cut from a typical two story composite building.